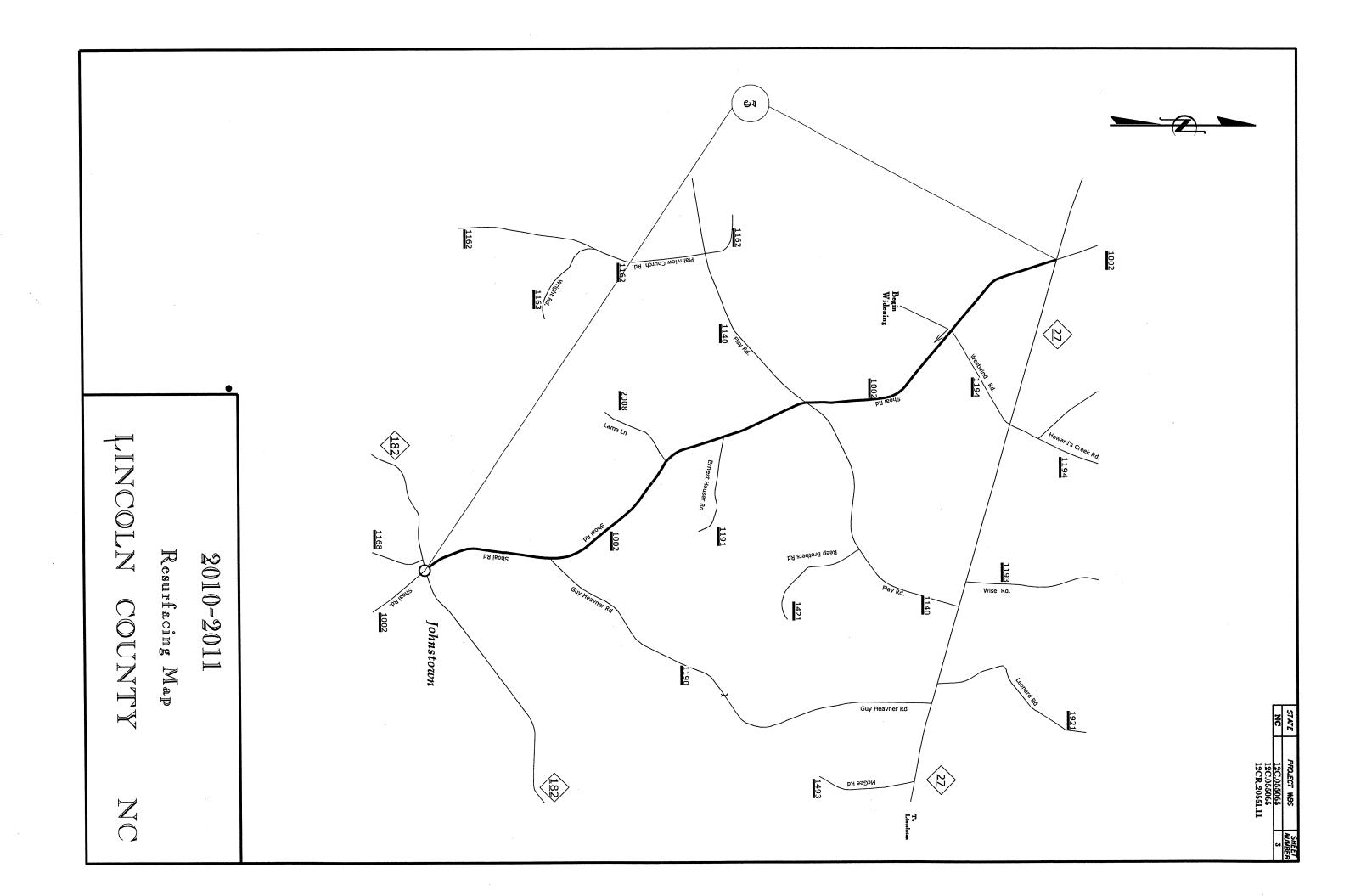
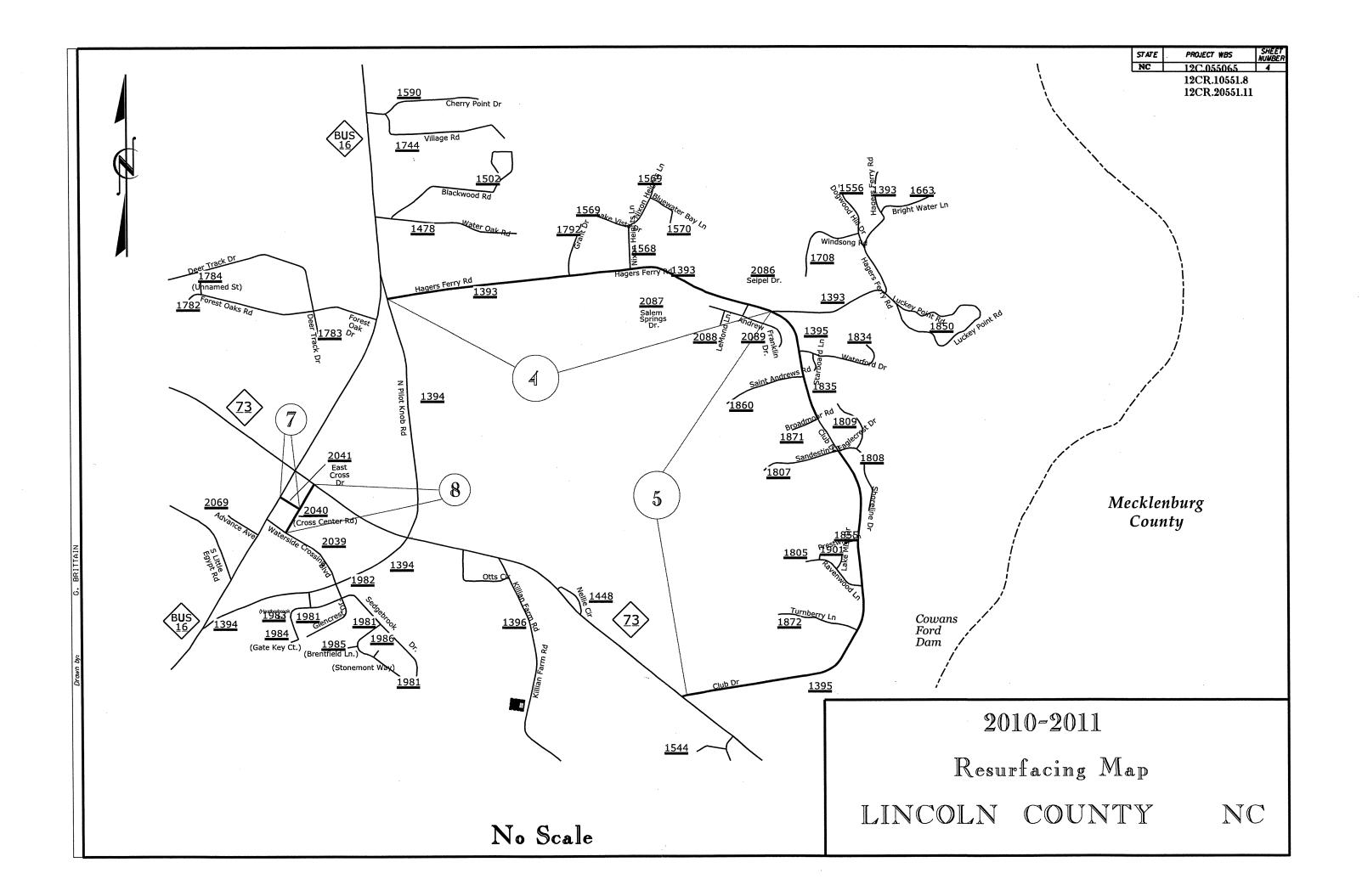
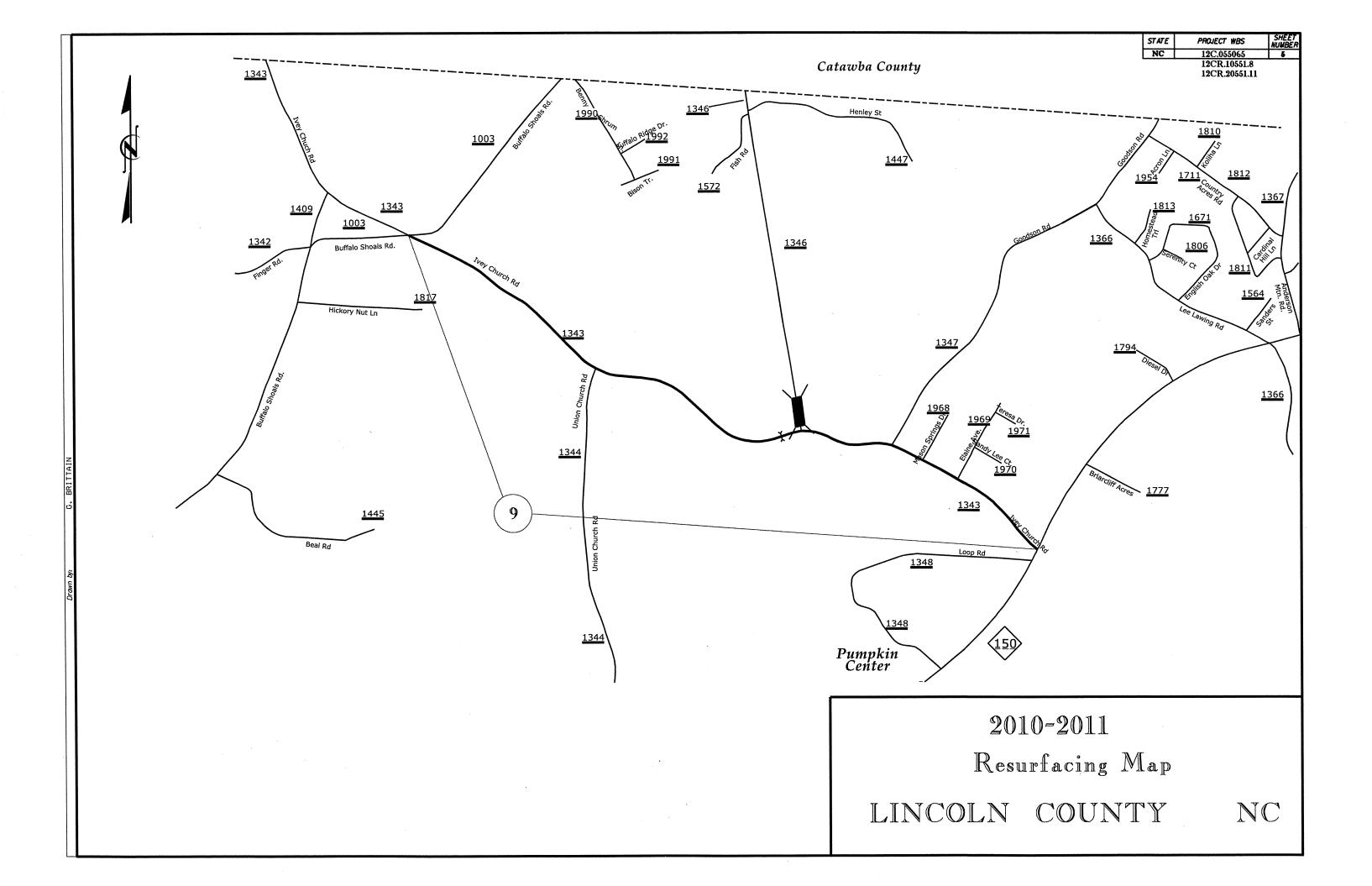


PROJECT WBS 12C.055065 12CR.10551.8 12CR.20551.11 Lowesville 2010-2011 Gaston County Resurfacing Map LINCOLN COUNTY NCNo Scale

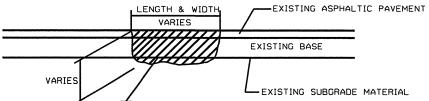






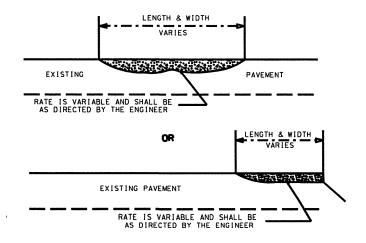
STATE PROJECT WBS 120.055065

> 12CR.101551.8 12CR.20551.11



MILL EXISTING ASPHALT PAVEMENT AND REMOVE EXISTING LOOSE BASE AND/OR SUBGRADE MATERIAL AND REPLACE WITH ACBC OR ACSC AS DIRECTED BY THE ENGINEER

PATCHING EXISTING PAVEMENT

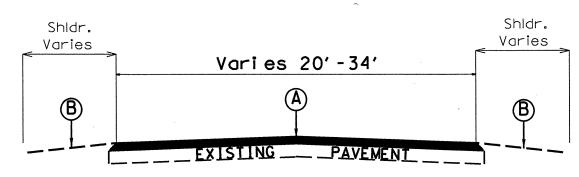


ASPHALT CONCRETE SURFACE COURSE TYPE S9.5B. (LEVELING COURSE)

	PAVEMENT SCHEDULE
Α	PROP. APPROX. $1\frac{1}{2}$ " ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
В	AGGREGATE SHOULDER BORROW (SHOULDER RECONSTRUCTION)
· C	PROP. APPROX. 8" OF ASPHALT BASE COURSE, TYPE B 25.0B, AT AN AVERAGE RATE OF 456 LBS PER SQ. YD. IN EACH OF TWO LIFTS

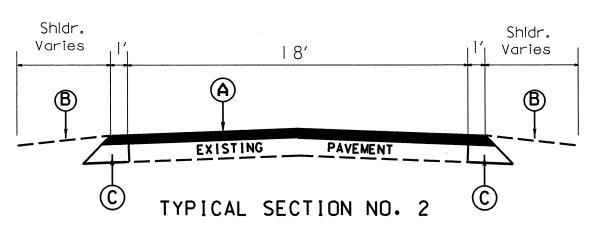
General Notes:

- * Pavement edge slopes are 1:1 unless specified otherwise.
- * Mill bridge approaches 100' to provide a smooth transition or as directed by the Engineer.



TYPICAL SECTION NO. 1

MAP # 1 - (entire map) MAP # 2 - (entire map) Map # 3 - 0+00 to 32+00Map # 6 - (entire map)



MAP # 3 - 32+00 to 172+00

Map # 4 - (entire map)

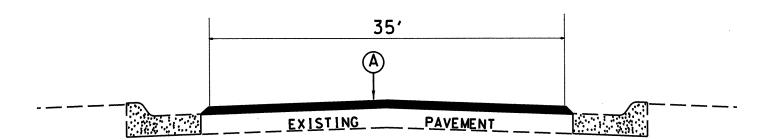
Map # 5 - (entire map)

Map # 9 - (entire map)

**Stations increase to the N & E

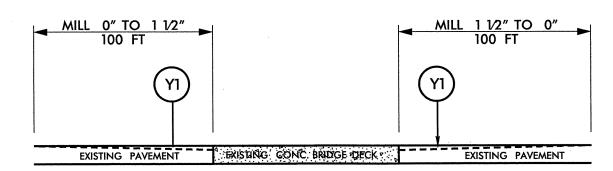
2010 - 2011 Resurfacing Program Typical Sections Lincoln County NC

12CR.20551.11

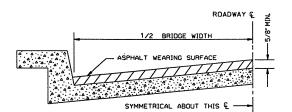


TYPICAL SECTION NO. 3

MAP # 7 - (entire map)
Map # 8 - (entire map)



DETAIL A MILLING BRIDGE APPROACHES



BRIDGE HALF TYPICAL SECTION

FOR BRIDGES WITH FLOOR DRAINS, CARE SHALL BE EXERCISED IN PLACING THE WEARING SURFACE AROUND FLOOR DRAINS SO AS NOT TO HINDER EFFECTIVE DRAINAGE. ALL DRAINS SHALL BE LEFT OPEN.

THE PROPOSED WEARING SURFACE SHALL VARY IN THICKNESS AS NECESSARY TO PROVIDE A SMOOTH RIDING SURFACE. A THICKNESS OF NOT LESS THAN 5/8" SHALL BE PROVIDED. THE MAXIMUM THICKNESS SHALL PREFERABLY BE 1-1/2" UNLESS IT IS IMPRACTICAL TO PROVIDE A SMOOTH RIDING SURFACE OTHERWISE.

NOTES

ALL UNPAYED S.R. ROADS TO BE SURFACED 50' FROM EDGE OF PAYEMENT OF MAIN PROJECT.
ALL PAYED S.R. ROADS TO BE RESURFACED TO THE ENDS OF THE RADII, OR AS DIRECTED BY THE ENGINEER.
EDGES, PAYEMENT WIDENING, INTERSECTIONS AND BRIDGE FLARES ARE INCLUED IN THE TABLE OF QUANTITIES.
SHOULDERS AND DITCHES ARE TO BE CONSTRUCTED BY OTHERS UNLESS OTHERWISE NOTED.
BRIDGES TO BE RESURFACED AT LOCATIONS AND TO DEPTH AS DIRECTED BY THE ENGINEER.

	PAVEMENT SCHEDULE
Α	PROP. APPROX. $1\frac{1}{2}$ " ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
В	AGGREGATE SHOULDER BORROW (SHOULDER RECONSTRUCTION)
С	PROP. APPROX. 8" OF ASPHALT BASE COURSE, TYPE B 25.0B, AT AN AVERAGE RATE OF 456 LBS PER SQ. YD. IN EACH OF TWO LIFTS
Υ1	PROP. APPROX. 0 – 1.5" OF INCIDENTAL MILLING

General Notes:

- * Pavement edge slopes are 1:1 unless specified otherwise.
- * Mill bridge approaches 100' to provide a smooth transition or as directed by the Engineer.

2010 - 2011
Resurfacing Program
Typical Sections
Lincoln County NC

PROJECT NO.	SHEET NO.	TOTAL NO.
12CR.10551.8		
12CR.20551.11	8	
12C.055065		

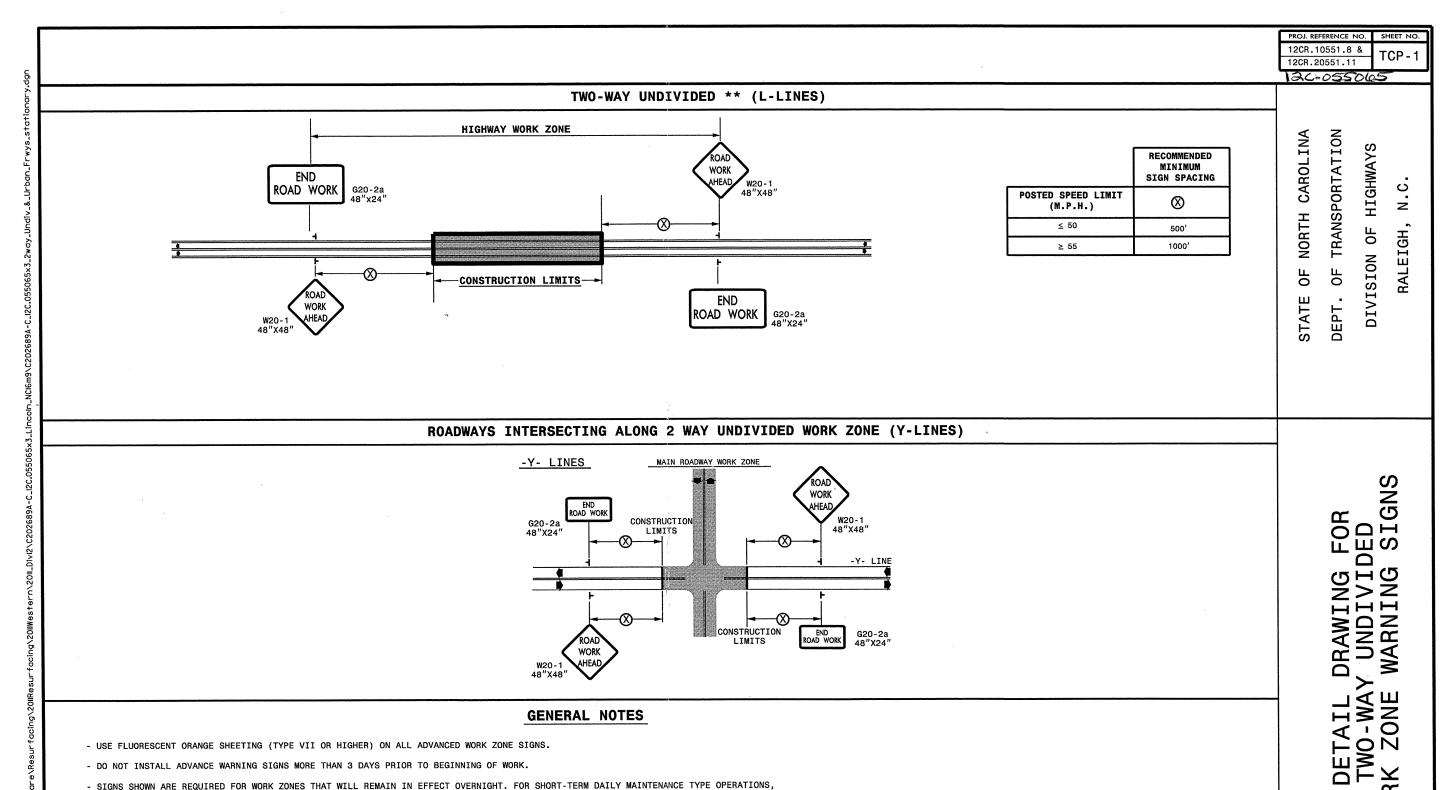
SUMMARY OF QUANTITIES

PROJECT	COUNTY	MAP	ROUTE	DESCRIPTION		LENGTH	WIDTH	INCIDENTAL STONE BASE	SHOULDER RECONSTR UCTION	AGGREGATE SHOULDER BORROW	INCIDENTAL MILLING	BASE COURSE, B25.0B	SURFACE COURSE, S9.5B	LEVELING COURSE, S9.5B	PG 64-22 PLANT MIX	PATCHING EXISTING PAVEMENT	ADJUSTMENT OF DROP INLET	OF	ADJUSTMENT OF METER OR	1
NO		NO			NO	MI	FT	TONS	SMI	TON	SY	TONS	TONS	TONS	TONS	TONS	EA	MANHOLES EA	VALVE BOX	LS
12CR.10551.8	Lincoln	1	NC 16	FROM SR 1379 TO CATAWBA CO.	1	3.71	24	100	7.94	302	700	0	6028	600	401	950	3	14	12	
12CR.10551.8	Lincoln	2	NC 16	FROM GASTON CO. TO SR 1397	1	1.15	24	40	2.30	88	0	0	1613	150	107	250	0	14	0	
T	OTAL FOR	PROJ	NO. 12CR.10551.8			4.86		140	10.24	390	700	0	7641	750	508	1,200	3	14	12	1 1
					,							2022	1 4444	400	074		· · · · · · · · · · · · · · · · · · ·		1 0	
12C.055065			SR 1002 (SHOAL RD)	FROM NC 182 TO NC 27	1,2	3.26	vars. 21-34	0	0	0	0	2300 2300	4144 4144	400 400	374 374	<u> </u>	<u> </u>	<u> </u>	 	
•	TOTAL FO	R PRO	J NO. 12C.055065									2300	4144	400	3/4					-
		<u> </u>								242						400			1 0	
12CR.20551.11	Lincoln	3	SR 1002 (SHOAL RD)	FROM NC 182 TO NC 27	1,2	3.26	vars. 21-34	140	6.52	248	0	1050	1556	200	160	200	<u> </u>	 	0	
12CR.20551.11	Lincoln	4	SR 1393 (HAGERS FERRY)	FROM SR 1394 TO SR 1395	2	1.40	20	60	2.80	107	0	1250	2237	220	224	250	0	0	0	
12CR.20551.11	Lincoln	5	SR 1395 (CLUB DR)	FROM SR 1393 TO NC 73	2	1.90	20	60	3.80	145	0	1750	2231	220	224	250	0	<u> </u>	 	
12CR.20551.11	Lincoln	6	SR 1375 (PINE RIDGE RD)	FROM SR 1373 TO END OF PVMT.	1	1.54	20	40	0.00	0	0	0	1727	175	115	350	0	0	0	
12CR.20551.11	Lincoln	7	SR 2041 (E. CROSS DR)	FROM NC 16 TO SR 2040	3	0.08	35	0	0.00	0	0	0	155	20	11	40	0	1 2	<u> </u>	ļ
12CR.20551.11	Lincoln	8	SR 2040 (CROSS CNTR. DR)	FROM SR 2039 TO NC 73	3	0.19	35	0	0.00	0	0	0	368	40	25	120	0	2	1	-
12CR.20551.11	Lincoln	9	SR 1343 (IVEY MEM CH RD)	FROM NC 150 TO SR 1003	2	2.77	21	100	5.54	211	0	2350	3250	350	319	350	0	0	0	
To	TAL FOR	PROJ	NO. 12CR.20551.11			11.14	<u> </u>	400	18.66	711	0	5350	9293	1,005	854	1,710	1 0	3	11	1 0
							1		1 22 22	1404	1	7050	21078	2155	1736	2910	l 3	17	13	1 1
	(SRANI	D TOTAL			12.74		540	28.90	1101	700	7650	210/8	2155	1/36	1 2910			13	

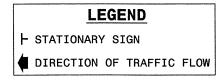
PROJECT NO.	SHEET NO.	TOTAL NO.
12CR.10551.8		
12CR.20551.11	9	
12C.055065		

THERMOPLASTIC AND PAINT QUANTITIES

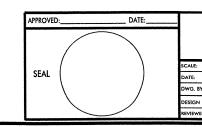
T	T															
				4685000000-E	468600	0000-E	4705000000-E	4710000000-E	472100	0000-E		4725000000-E		481000	0000-E	4905000000-N
OUNTY	MAP	ROUTE	DESCRIPTION	4" X 90 M	4" X 120 M	4" X 120 M	16" X 120 M	24" X 120 M	THERMO	THERMO	THERMO STR	THERMO LT	THERMO RT	4" WHITE	4" YELLOW	SNOW
00		1.00.12		1	WHITE	YELLOW	WHITE	WHITE	MSG	RXR 120 M	& RT ARROW	ARROW	ARROW 90	PAINT	PAINT	PLOWABLE
1	1			1 1				THERMO	SCHOOL 120		90 M	90 M	M			MARKERS
l				TILICINO	III LINIO	TILLIGIO	111214110		M		"					
1	NO			15	16	I F	1F	LF	EA	EA	EA	EA	EA	LF	LF	EA
	NU				<u> </u>	<u> </u>	<u> </u>									
	.		FD014 0D 4070 TO 04 TAVADA 00	40500	750	45500		250	12	0	2	45	2	0	0	410
	1						- 0				1 3 1	45	2	<u>0</u>	0	85
Lincoln	2	NC 16	FROM GASTON CO. TO SR 1397				U			U	U -	4	 0	<u>U</u>	<u> </u>	495
AI EOD	DPA I	NO 12CR 10551 8						310			3		<u> </u>		<u> </u>	495
AL FUR	FROS	NO. 12CK.10351.6		54,750	58,	775			11	2	<u> </u>	54				
															,	
Lincoln	3	SR 1002 (SHOAL RD)	FROM NC 182 TO NC 27					66	6			12				
	4		FROM SR 1394 TO SR 1395											30250	29500	
								30		-		4	2	42500	42500	
LITICOIT		SIC 1393 (CLOD DIC)	11(OW OK 1000 10 10 10	ļ												
		CD 4075 (DIME DIDGE DD)	FROM SR 1272 TO END OF BUMT	1			100	74		4				33250	32750	
	6			ļ			100	- 13		· · · · · · · · · · · · · · · · · · ·					02.00	
	7															
			1											50500	50500	
Lincoln	9	SR 1343 (IVEY MEM CH RD)	FROM NC 150 TO SR 1003										 			0
AL EOD	BBO I	NO 12CP 20551 11		0	0	0	100	170	6	4	0		<u> </u>			ļ <u>U</u>
AL FOR	FROJ	NO. 12CK.20551.11							1 1	0	<u> </u>	18		468	,750	<u> </u>
															·	
				54,750	1,075	57,700	100	480	18	4	3	65	4			495
G	RAND	TOTAL				775			2	22		72		468	,750	
L L L L L L L L L L L L L L L L L L L	incoln incoln incoln incoln incoln incoln incoln incoln	incoln 2 Incoln 3 Incoln 4 Incoln 5 Incoln 6 Incoln 7 Incoln 8 Incoln 9 IL FOR PROJ	incoln 1 NC 16 incoln 2 NC 16 AL FOR PROJ NO. 12CR.10551.8 incoln 3 SR 1002 (SHOAL RD) incoln 4 SR 1393 (HAGERS FERRY) incoln 5 SR 1395 (CLUB DR) incoln 6 SR 1375 (PINE RIDGE RD) incoln 7 SR 2041 (E. CROSS DR) incoln 8 SR 2040 (CROSS CNTR. DR)	incoln 1 NC 16 FROM SR 1379 TO CATAWBA CO. incoln 2 NC 16 FROM GASTON CO. TO SR 1397 AL FOR PROJ NO. 12CR.10551.8 incoln 3 SR 1002 (SHOAL RD) FROM NC 182 TO NC 27 incoln 4 SR 1393 (HAGERS FERRY) FROM SR 1394 TO SR 1395 incoln 5 SR 1395 (CLUB DR) FROM SR 1393 TO NC 73 incoln 6 SR 1375 (PINE RIDGE RD) FROM SR 1373 TO END OF PVMT. incoln 7 SR 2041 (E. CROSS DR) FROM NC 16 TO SR 2040 incoln 8 SR 2040 (CROSS CNTR. DR) FROM SR 2039 TO NC 73 incoln 9 SR 1343 (IVEY MEM CH RD) FROM NC 150 TO SR 1003 IL FOR PROJ NO. 12CR.20551.11	incoln 1 NC 16 FROM SR 1379 TO CATAWBA CO. 42500 incoln 2 NC 16 FROM GASTON CO. TO SR 1397 12250 AL FOR PROJ NO. 12CR.10551.8 54,750 incoln 3 SR 1002 (SHOAL RD) FROM NC 182 TO NC 27 incoln 4 SR 1393 (HAGERS FERRY) FROM SR 1394 TO SR 1395 incoln 5 SR 1395 (CLUB DR) FROM SR 1393 TO NC 73 incoln 6 SR 1375 (PINE RIDGE RD) FROM SR 1373 TO END OF PVMT. incoln 7 SR 2041 (E. CROSS DR) FROM NC 16 TO SR 2040 incoln 8 SR 2040 (CROSS CNTR. DR) FROM SR 2039 TO NC 73 incoln 9 SR 1343 (IVEY MEM CH RD) FROM NC 150 TO SR 1003 LL FOR PROJ NO. 12CR.20551.11	NO LF LF	NO	NO	NO LF LF LF LF LF LF LF L	NO	NO NO THERMO THERMO	NO	NO	NO THERMO THERMO THERMO THERMO THERMO THERMO THERMO THERMO THERMO M M M M M M M M M	NO THERMO THERMO THERMO THERMO THERMO THERMO THERMO THERMO THERMO M EA EA EA EA EA EA EA	NO THERMO THERM



- DO NOT INSTALL ADVANCE WARNING SIGNS MORE THAN 3 DAYS PRIOR TO BEGINNING OF WORK.
- SIGNS SHOWN ARE REQUIRED FOR WORK ZONES THAT WILL REMAIN IN EFFECT OVERNIGHT. FOR SHORT-TERM DAILY MAINTENANCE TYPE OPERATIONS, THIS SIGNING APPLICATION IS OPTIONAL; MAY USE ONLY APPLICABLE ROADWAY STANDARD DRAWINGS INSTEAD. HOWEVER, IF THIS SIGNING APPLICATION IS USED, SIGNS MAY BE PORTABLE MOUNTED.
- ALL SIGN SPACING DIMENSIONS ARE APPROXIMATE, FIELD ADJUST AS NECESSARY OR AS DIRECTED.
- USE 3LB STEEL U-CHANNEL POST OR 4" X 4" WOOD POST FOR ALL WORK ZONE SIGNS. 3LB STEEL U-CHANNEL POSTS MUST MEET THE REQUIREMENTS OF STANDARD SPECIFICATION SECTION 1094-1(B), MAY BE GALVANIZED STEEL, OR MAY BE PAINTED GREEN BY THE POST MANUFACTURER. SQUARE STEEL TUBING POSTS HAVING EQUIVALENT STRENGTH OF THE 3 LB STEEL U-CHANNEL POST ARE ALSO ACCEPTABLE FOR USE. ERECT SIGNS PER ROADWAY STANDARD DRAWING 1110.01. PAYMENT FOR WOOD POSTS, 3LB STEEL U-CHANNEL AND SQUARE STEEL TUBING POSTS WITH SIGNS WILL BE MADE ACCORDING TO STANDARD SPECIFICATION "WORK ZONE SIGNS" SECTION 1110.
- WHEN NECESSARY, USE SPLICING IN ACCORDANCE WITH ROADWAY STANDARD DRAWING NO. 1110.01. REMOVE ENTIRE POST WHEN REMOVING SIGNS WITH SPLICED POSTS.
- DO NOT BACK BRACE SIGN SUPPORTS.
- ** TWO-WAY UNDIVIDED ADVANCE WARNING SIGN CONFIGURATION MAY BE USED ON URBAN MULTI-LANE FACILITIES WHERE CONDITIONS LIMIT THE USE OF DUAL MOUNTED SIGNS AS DETERMINED BY THE ENGINEER.



SHEET 1 OF 1



DETAIL	DRAWING	FOR	TWO-W	ΙΑΥ
UNDIVIDE	D AND U	RBAN	FREE	NAYS
ADVANCED W	WORK ZONE	E WAR	NING	SIGNS

 CONTROL

KEVI:	SIONS
7–98	10/01
10-98	03/04
01/01	11/04
	7–98 10–98

WORK

PROJ. PEFECENCE NO. SHEET NO.
12.C.055065
12.C.10551.18
12CR.10551.11

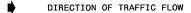
GENERAL NOTES

- (1) THE FOLLOWING OPTIONS MAY BE USED FOR ADVANCE WARNING SIGNS:
 - A. TRUCK MOUNTED SIGNS
 - B. TRUCK MOUNTED CHANGEABLE MESSAGE SIGN (CMS)
 C. GROUND MOUNTED ADVANCE WARNING SIGNS
 - C. GROUND MOUNTED ADVANCE WARNING SIGN (MUST CIRCLE TO PICK UP SIGNS)
 - D. GROUND MOUNTED CHANGEABLE MESSAGE SIGN (CMS)
 (MUST USE CIRCLE TO PICK UP SIGNS)
- (2) ALL ADVANCE WARNING SIGNS MUST BE 48" X 48" WITH FLUORESCENT ORANGE TYPE VII, VIII OR IX SHEETING. IF SPACE LIMITATIONS ON SHOULDER PROHIBIT A 48" X 48" SIGN, A SMALLER SIGN CAN BE USED WITH APPROVAL FROM ENGINEER.
- (3) SIGNS ON VEHICLES SHOULD BE MOUNTED A MINIMUM OF ONE (1) FOOT FROM THE GROUND AND SHOULD NOT BLOCK THE MOTORIST'S SIGHT OF THE FLASHING ARROW PANEL AND/OR LIGHTBAR.
- (4) GROUND MOUNTED ADVANCED WARNING SIGNS SHOULD BE MOUNTED A MINIMUM OF ONE (1) FOOT FROM THE GROUND TO BOTTOM OF SIGN.
- (5) SIGN SPACING SHOULD BE ADJUSTED FOR HORIZONTAL AND VERTICAL CURVES, ETC. TO IMPROVE SIGHT DISTANCES.
- (6) ADDITIONAL VEHICLES SHOULD BE USED IN WORK CARAVAN TO FACILITATE DRYING OF PAVEMENT MARKING MATERIAL (TMIA'S ARE OPTIONAL ON THESE ADDITIONAL VEHICLES). HOWEVER, THE FIRST VEHICLE MOTORISTS SEE IN THE TRAVEL LANE SHALL HAVE A TMIA.

- (7) ADJUST DISTANCE AS NEEDED TO PREVENT MOTORISTS FROM ENTERING SPACE BETWEEN THE APPLICATION AND PROTECTION VEHICLE. DISTANCE CAN BE LENGTHENED TO ACCOMODATE SIGHT DISTANCE NEEDS.
- (8) ROUND UP MILEAGE TO NEXT WHOLE MILE. WORK ZONE SHOULD NOT EXCEED FIVE (5) MILES IN LENGTH.
- (9) RADIO COMMUNICATION BETWEEN VEHICLES IS REQUIRED.
- (10) USE OF A LIGHT BAR ON ALL VEHICLES IS PREFERRED, BUT A ROTATING BEACON MAY BE USED INSTEAD.
- (11) IF WORK IS PERFORMED AT NIGHT, THE WORK AREA MUST BE ILLUMINATED WITH MACHINE AND/OR TOWER LIGHTS AS APPROVED BY THE ENGINEER.
- (12) ALL TRAFFIC CONTROL DEVICES WILL BE CONSIDERED INCIDENTAL TO THE PAY ITEMS FOR PAVEMENT MARKING AND MARKERS.
- (13) INFORMATIONAL SIGNS SHOULD BE ACTIVITY SPECIFIC, i.e.
 "PAINT CREW IN ROAD". SIGNS MAY BE RECTANGULAR OR DIAMOND SHAPE.
 SIGN SIZE SHOULD BE BASED ON THE MOTORIST ABILITY TO RECOGNIZE
 SIGN WHEN TRAVELING FIVE (5) MILES ABOVE POSTED SPEED LIMIT.
- (14) IF A LEAD VEHICLE IS ADDED TO OPERATION, IT SHOULD HAVE THE SAME ADVANCE WARNING SIGNS AS THE APPLICATION VEHICLE SHOWN BELOW.

LEGEND

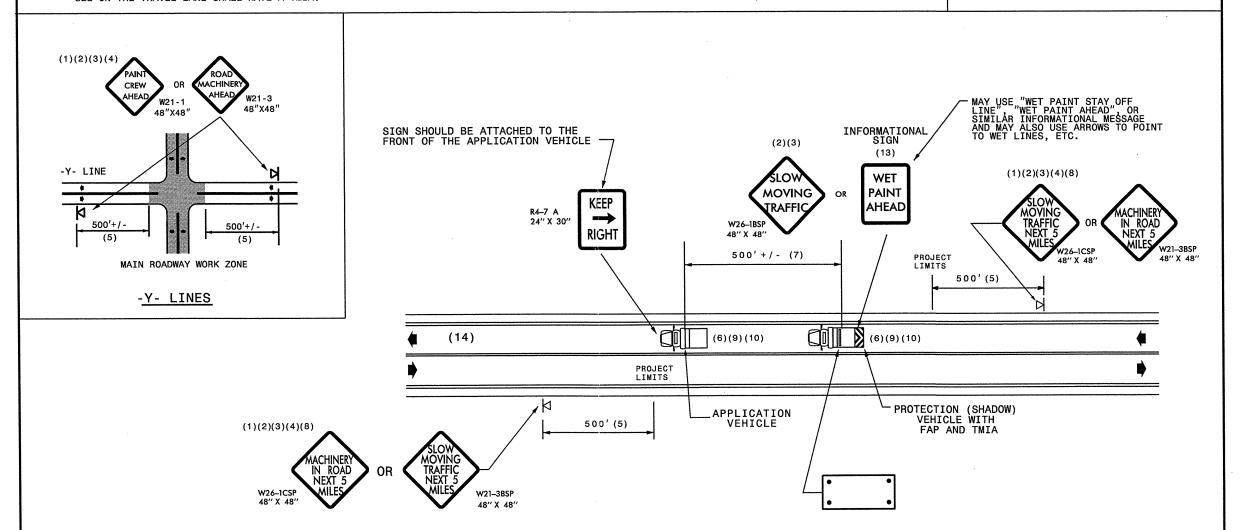
PORTABLE SIGN. SIGNS MUST BE NCHRP-350 AND NCDOT APPROVED.



APPLICATION VEHICLE WITH LIGHT BAR

PROTECTION VEHICLE WITH TRUCK MOUNTED IMPACT ATTENUATOR (TMIA) AND LIGHT BAR (SEE ROADWAY STANDARD NO. 1165.01). TMIA MUST BE NCHRP-350 TEST LEVEL 3 (60+MPH) APPROVED.

FLASHING ARROW PANEL, TYPE "B" (60"X30" MIN.), "CAUTION MODE"



MOVING OPERATION CARAVAN

(OPERATIONS TRAVELING 3 MPH OR FASTER)
PLACING PAVEMENT MARKING OR MARKERS
ON TWO-LANE TWO-WAY ROADWAYS

DRAWING NUMBER 6
IMPLEMENTATION DATE: 07/01/97
REVISED: 11/03/04